

PTO/SB/08A (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U. S. Patent and Trademark Office; U. S. DEPARTMENT OF COMMERCE

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				Application Number	10/687,017
				Filing Date	October 16, 2003
				First Named Inventor	Yaming Jin
				Group Art Unit	1754
				Examiner Name	C. NGUYEN
Sheet	1	of	1	Attorney Docket Number	1856-24501 (9518.0-01)

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
CAN	AA	US-4602000	07/22/1986	Dupin et al.	
CAN	AB	US-5874381	02/23/1999	Bonne et al.	
CAN	AC	US-6806226	10/19/2004	Van Berge et al.	
CAN	AD	US-6835690	12/28/2004	Van Berge et al.	
CAN	AE	US-2003/0162849	08/28/2003	Van Berge et al.	
CAN	AF	US-2004/0186188	09/23/2004	Van Berge et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
CAN	AG	WO 03/012008 A2	02/13/2003	Sasol Technology		
CAN	AH	WO 01/87480 A1	11/22/2001	Perial Chemical Industries PLC		
CAN	AI	WO 01/76735 A1	10/18/2001	Phillips Petroleum Company		
CAN	AJ	WO 00/45948	08/10/2000	Sasol Technology		
CAN	AK	ZA 2001/6213	07/27/2001	Sasol Technology		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²

Examiner Signature	CAN Nguyen	Date Considered	10/19/05
--------------------	------------	-----------------	----------

*EXAMINER: Initial reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard Si.16 if possible. 6 Applicant is to place a check mark here if English language translation is attached. The collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P. O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORM TO THIS ADDRESS. Send To Commissioner For Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2

ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18

Stylesheet Version v18.0

Title of Invention

High Hydrothermal Stability Catalyst Support

Application Number : 10/687017



Confirmation Number: 9148

First Named Applicant: Yaming Jin

Attorney Docket Number: 1856-24501

Art Unit: 1754

Examiner:

Search string: (3773691 or 3979504 or 4045234 or 4244986 or 4297336 or 4397964 or 4447351 or 4508841 or 5948726 or 6027706).pn

US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
CM	1	3773691	1973-11-20	Leach			
CM	2	3979504	1976-09-07	Ziegenhain et al.			
CM	3	4045234	1977-08-30	Ring			
CM	4	4244986	1981-01-13	Paruso et al.			
CM	5	4297336	1981-10-27	Marsden			
CM	6	4397964	1983-08-09	Pargeter et al.			
CM	7	4447351	1984-05-05	Chao			
CM	8	4508841	1985-04-02	Onuma et al.			
CM	9	5948726	1999-09-07	Moskovitz et al.			
CM	10	6027706	2000-02-22	Pinnavaia et al.			

Remarks

Note: Remarks are not for responding to an office action.

The submission of this Supplemental electronic Information Disclosure Statement (eIDS) is not an admission that the art cited is "prior" with respect to the present invention, nor is it a representation that no better art exists. Applicants hereby reserve the right to swear behind or otherwise disprove any alleged "prior" nature of any art cited should the facts support and the situation warrant such an action. It is submitted that the art cited does not constitute a bar to the patentability of Applicants' invention under 35 U.S.C. 102 or 103.

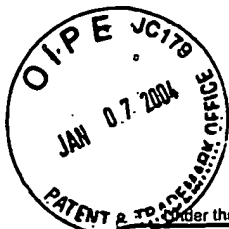
Signature

Examiner Name

Date

Cam Nguyen

10/19/05



PTO/SB/08A (08-03)
Approved for use through 07/31/2008. OMB 0851-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 4

Complete if Known

Application Number	10/687,017
Filing Date	October 16, 2003
First Named Inventor	Yaming Jin
Art Unit	Not Yet Assigned 1754
Examiner Name	Not Yet Assigned C. Nguyen
Attorney Docket Number	1856-24501

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
can		US- 2,892,858	06-30-1959	Ziegler	
		US- 3,852,190	12-03-1974	Buss et al.	
		US- 4,012,313	03-15-1977	Buss et al.	
		US- 4,063,851	12-20-1977	Weldon	
		US- 4,224,192	09-23-1980	Foster et al.	
		US- 4,387,085	06-07-1983	Fanelli et al.	
		US- 4,617,183	10-14-1986	Lewis et al.	
		US- 4,708,945	11-24-1987	Murrell et al.	
		US- 4,744,974	05-17-1988	Lewis et al.	
		US- 4,831,007	05-16-1989	Murrell et al.	
		US- 4,891,127	01-02-1990	Murrell et al.	
		US- 5,055,019	10-08-1991	Meyer et al.	
		US- 5,102,851	04-07-1992	Eri et al.	
		US- 5,116,879	05-26-1992	Eri et al.	
		US- 5,134,107	07-28-1992	Narula	
		US- 5,232,580	08-03-1993	Le et al.	
		US- 5,837,634	11-17-1998	McLaughlin et al.	
		US- 6,063,358	05-16-2000	Lindquist et al.	
can		US- 6,224,846	05-01-2001	Hurburt et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁴
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
can		GB 640,965	08-02-1950	Anglo-Iranian Oil Co.		
can		GB 2 352 194 A	01-24-2001	Sasol Technology		
can		WO 02/07883 A2	01-31-2002	Sasol Technology		
can		WO 99/42214	08-26-1999	Sasol Technology		

Examiner
Signature

Cam Nguyen

Date
Considered

10/19/05

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known

Application Number	10/687,017
Filing Date	October 16, 2003
First Named Inventor	Yaming Jin
Art Unit	Not Yet Assigned 1754
Examiner Name	Not Yet Assigned C. Nguyen
Attorney Docket Number	1856-24501

Sheet	2	of	4
-------	---	----	---

U. S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

[illegible]

Examiner Signature	Cam Nguyen	Date Considered	10/19/05
-----------------------	------------	--------------------	----------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known			
		Application Number	10/687,017		
		Filing Date	October 16, 2003		
		First Named Inventor	Yaming Jin		
		Group Art Unit	Not Yet Assigned 1754		
Examiner Name	Not Yet Assigned C. Nguyen				
Sheet	3	of	4	Attorney Docket Number	1856-24501

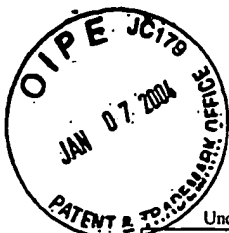
NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate) title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issued number(s), publisher, city and/or country where published.	T ²
Can		IHNS SCHULZ; Short History and Present Trends of Fischer-Tropsch Synthesis; Abstract; Universiot Karlsruhe, Germany; 10 pages.	
		M. ABSI-HALABI, et al.; "Studies on Pore Size Control of Alumina: Preparation of Alumina Catalyst Extrudates with Large Unimodal Pore Structure by Low Temperature Hydrothermal Treatment"; Preparation of Catalysts V, 1991 Elsevier Science Publishers B.V., Amsterdam, pp. 155 - 163.	
		ALCOA WORLD CHEMICAL; "High purity, high density, boehmite aluminas"; ALCOA Product Data USA/6070-RO4/0801; 2 pages.	
		ALCOA WORLD CHEMICAL; "High purity, high density, boehmite aluminas"; ALCOA Product Data Sheet USA/6070-RO4/0801; 2 pages.	
		CONDEA; "High purity activated aluminas PURALOX, CATALOX"; Product Information Sheet 10/99; 6 pages	
		RONG-SHENG ZHOU, et al.; "Structures and Transformation Mechanisms of the η , γ and θ Transition Aluminas"; International Union of Crystallography 1991; Institute for Ceramic Superconductivity, New York State College of Ceramics, Alfred University, Alfred, NY 14802, USA; pp. 617-630	
		RICHARD L. SMITH, et al.; "The Influence of Diaspore Seeding and Chlordie Concentration on the Transformation of 'Diasporic' Precursors to Corundum"; Journal of the American Ceramic Society, October 16, 2000; 31 pages.	
		S. MATSUDA, et al.; "A New Support Material for Catalytic Combustion Above 1000 C"; 8th International Congress on Catalysis; Vol. IV: Impact of surface science on catalysis, structure-selectivity/activity correlations, new routes for catalyst synthesis, pages IV-879-IV-889.	
		H.C. STUMPF, et al.; "Thermal Transformations of Aluminas and Alumina Hydrates"; Industrial and Engineering Chemistry, Vol. 42, No. 7, July 1950; pages 1398-1403.	
		SHU-HUI CAI, et al.; "Atomic Scale Mechanism of the Transformation of γ -Alumina to θ -Alumina"; The American Physical Society 2002; Physical Review Letters, Vol. 89, No. 23; December 2, 2002; 4 pages.	
Can		ZHONG-WEN LIU, et al.; "Partial Oxidation of Methane Over Nickel Catalysts Supported on Various Aluminas"; Korean J. Chem. Eng., Vol. 19, No. 5, pages 735-741 (2002).	

Examiner Signature	Cam Nguyen	Date Considered	10/19/05
---------------------------	------------	------------------------	----------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete If Known	
				Application Number	10/687,017
				Filing Date	October 16, 2003
				First Named Inventor	Yaming Jin
				Group Art Unit	Not Yet Assigned <i>1734</i>
				Examiner Name	Not Yet Assigned <i>C. Nguyen</i>
Sheet	4	of	4	Attorney Docket Number	1856-24501

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.†	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate) title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issued number(s), publisher, city and/or country where published.	T²
<i>Can</i>		HYUN-SEOG ROH, et al.; "Partial Oxidation of Methane Over Ni/θ-A1 ₂ O ₃ Catalysts"; Chemistry Letters 2001; March 19, 2001; pages 666-667.	
		HYUN-SEOG ROH, et al.; "Partial Oxidation of Methane Over Ni/Ce-ZrO ₂ /θ-A1 ₂ O ₃ "; Korean J. CHem. Eng., Vol. 19, No. 5; pages 742-748 (2002).	
		HIROMICHI ARAI, et al.; "Thermal stabilization of catalysts supports and their application to high-temperature catalytic combustion"; Applied Catalysis A: General 138 (1996); pages 161-176; Elsevier Science Publishers B.V., Amsterdam.	
		BERNARD BEGUIN et al.; "Stabilization of alumina by addition of lanthanum"; Applied Catalysis A: General 138 (1996); pages 161-176; Elsevier Science Publishers B.V., Amsterdam.	
		FRANCOIS OUDET, et al.; "Thermal Stabilization of Transition Alumina by Structural Coherence with LnAlO ₃ (Ln = La, Pr, Nd)"; Journal of Catalysts Vol. 114; pages 112-120 (1988).	
		H. SCHAPER, et al.; "The Influence of Lanthanum Oxide on the Thermal Stability of Gamma Alumina Catalyst Supports"; Applied Catalysis, Vol. 7 (1983), pages 211-220; Elsevier Science Publishers B.V., Amsterdam.	
		JALAJAKUMARI NAIR, et al.; "Pore Structure Evolution of Lanthana-Alumina Systems Prepared Through Coprecipitation"; J. Am Ceram. Soc., Vol. 83, No. 8; pages 1942-46 (2000).	
		S. N. RASHKEEV, et al.; "Transition metal atoms on different alumina phases: The role of subsurface sites on catalytic activity"; Physical Review B, Vol. 67, No. 115414; 4 pages.	
		HENNIE SCHAPER, et al.; "Thermal Stabilization of High Surface Area Lumina"; Solid State Ionics, Vol. 16 (1985), pages 261-266.	
		XIAOYIN CHEN, et al.; "High temperature stabilization of alumina modified b lanthanum species"; Applied Catalysis A: General, Vol. 205 (2001); pages 159-172.	
		S. SUBRAMANIAN, et al.; "Characterization of lanthana/alumina composite oxides"; Journal of Molecular Catalysis, Vol. 69 (1991); pages 235-245.	
<i>Can</i>		P. SOUZA SANTOS, et al.; "Standard Transition Aluminas. Electron Microscopy Studies"; Materials Research, Vol. 3, No. 4; pages 104-114, 2000.	

Examiner Signature	<i>Cam Nguyen</i>	Date Considered	<i>10/19/05</i>
--------------------	-------------------	-----------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

†Applicant's unique citation designation number (optional). ‡Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.